

# SEQUENCE LISTING

<110> Tohyama, Masaya  
Yamashita, Toshihide

<120> COMPOSITION AND METHOD FOR NERVE REGENERATION

<130> 59150-8023.US00

<140> Not Yet Assigned

<141> Filed Herewith

<150> US 10/427,741

<151> 2003-04-30

<150> JP 2003-92923

<151> 2003-03-28

<160> 27

<170> PatentIn version 3.1

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<212> DNA

<213> Artificial Sequence

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Arg Lys Tyr Lys Glu Ala Leu Leu Gly Arg Val Ala Val Ser Ala Asp
50          55          60
Pro Asn Val Pro Asn Val Val Thr Gly Leu Thr Leu Val Cys Ser
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Ser Ala Pro Gly Pro Leu Glu Leu Asp Leu Thr Gly Asp Leu Glu Ser
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<213> Rattus norvegicus

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<212> PRT

<213> Rattus norvegicus

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 <211> 1162  
 <212> PRT  
 <213> Mus musculus

<400> 10

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Pro	Glu	Asp	Asp	Glu	Pro	Pro	Ala	Arg	Pro	Pro	Ala	Pro	Ala	Gly	Ala
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Lys	Arg	Arg	Gly	Ser	Gly	Ser	Val	Asp	Glu	Thr	Leu	Phe	Ala	Leu	Pro
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Thr	Pro	Asp	Leu	Val	Gln	Glu	Ala	Cys	Glu	Ser	Glu	Leu	Asn	Glu	Ala
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Thr	Gly	Thr	Lys	Ile	Ala	Tyr	Glu	Thr	Lys	Val	Asp	Leu	Val	Gln	Thr
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Ser	Glu	Ala	Ile	Gln	Glu	Ser	Ile	Tyr	Pro	Thr	Ala	Gln	Leu	Cys	Pro
			565						570					575	
Ser	Phe	Glu	Glu	Ala	Glu	Ala	Thr	Pro	Ser	Pro	Val	Leu	Pro	Asp	Ile





Thr	Tyr	Val	Gly	Ala	Leu	Phe	Asn	Gly	Leu	Thr	Leu	Leu	Ile	Leu
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Gln	Ala	Gln	Ile	Asp	His	Tyr	Leu	Gly	Leu	Ala	Asn	Lys	Ser	Val
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Lys	Asp	Ala	Met	Ala	Lys	Ile	Gln	Ala	Lys	Ile	Pro	Gly	Leu	Lys
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<210> 11  
 <211> 582  
 <212> DNA  
 <213> Homo sapien

<400> 11

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 <212> PRT  
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<400> 12

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Asp	Gly	Lys	Gln	Val	Glu	Leu	Ala	Leu	Trp	Asp	Thr	Ala	Gly	Gln	Glu
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Asp	Tyr	Asp	Arg	Leu	Arg	Pro	Leu	Ser	Tyr	Pro	Asp	Thr	Asp	Val	Ile
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Leu	Met	Cys	Phe	Ser	Ile	Asp	Ser	Pro	Asp	Ser	Leu	Glu	Asn	Ile	Pro
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Glu	Lys	Trp	Thr	Pro	Glu	Val	Lys	His	Phe	Cys	Pro	Asn	Val	Pro	Ile
			100					105					110		
Ile	Leu	Val	Gly	Asn	Lys	Lys	Asp	Leu	Arg	Asn	Asp	Glu	His	Thr	Arg
			115				120					125			
Arg	Glu	Leu	Ala	Lys	Met	Lys	Gln	Glu	Pro	Val	Lys	Pro	Glu	Glu	Gly
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Arg	Asp	Met	Ala	Asn	Arg	Ile	Gly	Ala	Phe	Gly	Tyr	Met	Glu	Cys	Ser
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Ala	Lys	Thr	Lys	Asp	Gly	Val	Arg	Glu	Val	Phe	Glu	Met	Ala	Thr	Arg
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 <211> 1145  
 <212> DNA  
 <213> Mus musculus

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 <211> 159  
 <212> PRT  
 <213> Mus musculus

<400> 14  
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 35 40 45  
 Asn Phe Asp Phe Val Thr Glu Thr Pro Leu Glu Gly Asn Phe Val Trp  
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 Glu Arg Val Arg Ser Leu Gly Leu Pro Lys Val Tyr Leu Ser Pro Gly  
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 Ser Arg Ser Arg Asp Asp Leu Gly Gly Asp Lys Arg Pro Ser Thr Ser  
 85 90 95  
 Ser Ala Leu Leu Gln Gly Pro Ala Pro Glu Asp His Val Ala Leu Ser  
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 Leu Ser Cys Thr Leu Val Ser Glu Arg Pro Glu Asp Ser Pro Gly Gly  
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<220>  
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<400> 15

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<210> 16

<211> 3259

<212> DNA

<213> Rattus norvegicus

<400> 16

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<210> 17  
<211> 425  
<212> PRT  
<213> Rattus norvegicus

<400> 17

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Tyr	Ser	Ser	Leu	Pro	Leu	Thr	Lys	Arg	Glu	Glu	Val	Glu	Lys	Leu	Leu
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 <212> DNA  
 <213> Homo sapien

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<210> 23  
 <211> 164  
 <212> PRT  
 <213> Homo sapien

<400> 23

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Ala	Cys	Arg	Arg	Leu	Phe	Gly	Pro	Val	Asp	Ser	Glu	Gln	Leu	Ser	Arg
			20					25					30		
Asp	Cys	Asp	Ala	Leu	Met	Ala	Gly	Cys	Ile	Gln	Glu	Ala	Arg	Glu	Arg
		35					40					45			
Trp	Asn	Phe	Asp	Phe	Val	Thr	Glu	Thr	Pro	Leu	Glu	Gly	Asp	Phe	Ala
	50					55					60				
Trp	Glu	Arg	Val	Arg	Gly	Leu	Gly	Leu	Pro	Lys	Leu	Tyr	Leu	Pro	Thr
65					70					75				80	
Gly	Pro	Arg	Arg	Gly	Arg	Asp	Glu	Leu	Gly	Gly	Gly	Arg	Arg	Pro	Gly
				85					90					95	
Thr	Ser	Pro	Ala	Leu	Leu	Gln	Gly	Thr	Ala	Glu	Glu	Asp	His	Val	Asp
			100					105					110		
Leu	Ser	Leu	Ser	Cys	Thr	Leu	Val	Pro	Arg	Ser	Gly	Glu	Gln	Ala	Glu
		115					120					125			
Gly	Ser	Pro	Gly	Gly	Pro	Gly	Asp	Ser	Gln	Gly	Arg	Lys	Arg	Arg	Gln
		130				135					140				
Thr	Ser	Met	Thr	Asp	Phe	Tyr	His	Ser	Lys	Arg	Arg	Leu	Ile	Phe	Ser
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Lys	Arg	Lys	Pro												

<210> 24  
 <211> 11  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> substrate

<400> 24

Ala	Lys	Arg	Arg	Arg	Leu	Ser	Ser	Leu	Arg	Ala
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<210> 25  
 <211> 72  
 <212> PRT  
 <213> Human adenovirus type 1

<400> 25

Met	Glu	Pro	Val	Asp	Pro	Lys	Leu	Glu	Pro	Trp	Lys	His	Pro	Gly	Ser
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Gln	Pro	Lys	Thr	Ala	Cys	Asn	Asn	Cys	Tyr	Cys	Lys	Val	Cys	Cys	Phe
			20					25					30		
His	Cys	Gln	Val	Cys	Phe	Thr	Lys	Lys	Gly	Leu	Gly	Ile	Ser	Tyr	Gly
		35					40					45			
Arg	Lys	Lys	Arg	Arg	Gln	Arg	Arg	Arg	Ala	Pro	Gln	Asp	Ser	Gln	Thr
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His	Gln	Ala	Pro	Leu	Pro	Lys	Gln								
65					70										

<210> 26  
 <211> 3305  
 <212> DNA  
 <213> Rattus norvegicus

<400> 26

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aacgactcca	cggcgtctca	ggacgtggcc	aaccgcttcg	cccgcaaagg	ggcgtgagg	300
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accttctgca	gccactgcac	cgacttcac	tgggggtttg	gaaaacaagg	cttccagtgc	420
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<210> 27  
 <211> 672  
 <212> PRT  
 <213> Rattus norvegicus

<400> 27

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			20					25					30		
Glu	Val	Lys	Asp	His	Lys	Phe	Ile	Ala	Arg	Phe	Phe	Lys	Gln	Pro	Thr
		35					40					45			
Phe	Cys	Ser	His	Cys	Thr	Asp	Phe	Ile	Trp	Gly	Phe	Gly	Lys	Gln	Gly
	50					55					60				
Phe	Gln	Cys	Gln	Val	Cys	Cys	Phe	Val	Val	His	Lys	Arg	Cys	His	Glu
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Phe	Val	Thr	Phe	Ser	Cys	Pro	Gly	Ala	Asp	Lys	Gly	Pro	Asp	Thr	Asp
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Asp	Pro	Arg	Ser	Lys	His	Lys	Phe	Lys	Ile	His	Thr	Tyr	Gly	Ser	Pro
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Thr	Phe	Cys	Asp	His	Cys	Gly	Ser	Leu	Leu	Tyr	Gly	Leu	Ile	His	Gln
		115					120					125			
Gly	Met	Lys	Cys	Asp	Thr	Cys	Asp	Met	Asn	Val	His	Lys	Gln	Cys	Val
	130					135					140				
Ile	Asn	Val	Pro	Ser	Leu	Cys	Gly	Met	Asp	His	Thr	Glu	Lys	Arg	Gly
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Arg	Ile	Tyr	Leu	Lys	Ala	Glu	Val	Thr	Asp	Glu	Lys	Leu	His	Val	Thr
				165					170					175	
Val	Arg	Asp	Ala	Lys	Asn	Leu	Ile	Pro	Met	Asp	Pro	Asn	Gly	Leu	Ser
			180					185					190		
Asp	Pro	Tyr	Val	Lys	Leu	Lys	Leu	Ile	Pro	Asp	Pro	Lys	Asn	Glu	Ser
		195					200					205			
Lys	Gln	Lys	Thr	Lys	Thr	Ile	Arg	Ser	Thr	Leu	Asn	Pro	Gln	Trp	Asn
	210					215					220				
Glu	Ser	Phe	Thr	Phe	Lys	Leu	Lys	Pro	Ser	Asp	Lys	Asp	Arg	Arg	Leu
225					230					235					240
Ser	Val	Glu	Ile	Trp	Asp	Trp	Asp	Arg	Thr	Thr	Arg	Asn	Asp	Phe	Met
				245					250					255	
Gly	Ser	Leu	Ser	Phe	Gly	Val	Ser	Glu	Leu	Met	Lys	Met	Pro	Ala	Ser
		260						265					270		
Gly	Trp	Tyr	Lys	Leu	Leu	Asn	Gln	Glu	Glu	Gly	Glu	Tyr	Tyr	Asn	Val
		275					280					285			
Pro	Ile	Pro	Glu	Gly	Asp	Glu	Glu	Gly	Asn	Val	Glu	Leu	Arg	Gln	Lys
	290					295					300				
Phe	Glu	Lys	Ala	Lys	Leu	Gly	Pro	Ala	Gly	Asn	Lys	Val	Ile	Ser	Pro

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					325					330						335		
Thr	Asp	Phe	Asn	Phe	Leu	Met	Val	Leu	Gly	Lys	Gly	Ser	Phe	Gly	Lys			
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Val	Met	Leu	Ala	Asp	Arg	Lys	Gly	Thr	Glu	Glu	Leu	Tyr	Ala	Ile	Lys			
		355					360					365						
Ile	Leu	Lys	Lys	Asp	Val	Val	Ile	Gln	Asp	Asp	Asp	Val	Glu	Cys	Thr			
	370					375					380							
Met	Val	Glu	Lys	Arg	Val	Leu	Ala	Leu	Leu	Asp	Lys	Pro	Pro	Phe	Leu			
	385					390				395					400			
Thr	Gln	Leu	His	Ser	Cys	Phe	Gln	Thr	Val	Asp	Arg	Leu	Tyr	Phe	Val			
			405						410					415				
Met	Glu	Tyr	Val	Asn	Gly	Gly	Asp	Leu	Met	Tyr	His	Ile	Gln	Gln	Val			
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Gly	Lys	Phe	Lys	Glu	Pro	Gln	Ala	Val	Phe	Tyr	Ala	Ala	Glu	Ile	Ser			
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Ile	Gly	Leu	Phe	Phe	Leu	His	Lys	Arg	Gly	Ile	Ile	Tyr	Arg	Asp	Leu			
	450					455					460							
Lys	Leu	Asp	Asn	Val	Met	Leu	Asp	Ser	Glu	Gly	His	Ile	Lys	Ile	Ala			
	465				470					475					480			
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Thr	Phe	Cys	Gly	Thr	Pro	Asp	Tyr	Ile	Ala	Pro	Glu	Ile	Ile	Ala	Tyr			
		500						505					510					
Gln	Pro	Tyr	Gly	Lys	Ser	Val	Asp	Trp	Trp	Ala	Tyr	Gly	Val	Leu	Leu			
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Tyr	Glu	Met	Leu	Ala	Gly	Gln	Pro	Pro	Phe	Asp	Gly	Glu	Asp	Glu	Asp			
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Glu	Leu	Phe	Gln	Ser	Ile	Met	Glu	His	Asn	Val	Ser	Tyr	Pro	Lys	Ser			
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Leu	Ser	Lys	Glu	Ala	Val	Ser	Ile	Cys	Lys	Gly	Leu	Met	Thr	Lys	His			
		565						570						575				
Pro	Ala	Lys	Arg	Leu	Gly	Cys	Gly	Pro	Glu	Gly	Glu	Arg	Asp	Val	Arg			
		580					585						590					
Glu	His	Ala	Phe	Phe	Arg	Arg	Ile	Asp	Trp	Glu	Lys	Leu	Glu	Asn	Arg			
	595						600					605						
Glu	Ile	Gln	Pro	Pro	Phe	Lys	Pro	Lys	Val	Cys	Gly	Lys	Gly	Ala	Glu			
	610				615					620								
Asn	Phe	Asp	Lys	Phe	Phe	Thr	Arg	Gly	Gln	Pro	Val	Leu	Thr	Pro	Pro			
	625				630				635					640				
Asp	Gln	Leu	Val	Ile	Ala	Asn	Ile	Asp	Gln	Ser	Asp	Phe	Glu	Gly	Phe			
			645					650					655					
Ser	Tyr	Val	Asn	Pro	Gln	Phe	Val	His	Pro	Ile	Leu	Gln	Ser	Ala	Val			
		660					665					670						